

19970912.qrp v00_n846.qrs.970912

>From ???@??? Sat Sep 13 11:38:40 1997
Date: Fri, 12 Sep 1997 19:03:12 EDT
Subject: QRP-L digest 846
Message-Id: <97Sep12.190615edt.35454-17472+208@fidoii.cc.Lehigh.EDU>

QRP-L Digest 846

Topics covered in this issue include:

- 1) [26628] Re: QRP-L Web Page?
by Ed Loranger <we6w@qsl.net>
- 2) [26629] Re: F Connector usage
by Ed Tanton <n4xy@bellsouth.net>
- 3) [26630] Pacificon: I'll Be there!
by Ed Loranger <we6w@qsl.net>
- 4) [26631] FS: TT 405 amp, QRP, PS, HTs, ants, paddles, xvtr, QSTs, etc
by "Scott Rosenfeld [NF3I]" <ham@w3eax.umd.edu>
- 5) [26632] QRP SSB
by David Smith <qrp-dave@ocsn.net>
- 6) [26633] Finding the Hams of the Future
by Bob Roach <KE4QOK@worldnet.att.net>
- 7) [26634] Re: Pacificon: I'll Be there!
by Chris Cartwright <ccart@dns.vidtel.com>
- 8) [26635] Re: Zo of 18ga zip cord??
by "Bob Edwards, W4ED" <w4ed@flash.net>
- 9) [26636] Re: Zo of 18ga zip cord??
by "Bob Edwards, W4ED" <w4ed@flash.net>
- 10) [26637] Re: W9GR DSP-3 vs Timewave?
by Bob Okas <vintage@best.com>
- 11) [26638] end fed half wave antenna
by Addi Pittman <cornea@vsta.com>
- 12) [26639] Re: F Connector usage
by Sandy W5TVW <ebjr@worldnet.att.net>
- 13) [26640] Re: Zo of 18ga zip cord??
by "Ray Dennis" <w0dq@hotmail.com>
- 14) [26641] Re: Ex-scouts and qrp
by "Watson R Gabriel Jr" <wgabriel@duke-energy.com>
- 15) [26642] Sierra - Low power on 20
by tahrens1@juno.com
- 16) [26643] Re: Sideband QRP -Reply
by Jim Francoeur KC1FB <jim_kc1fb@pipeline.com>
- 17) [26644] F.S. Daiwa Wattmeter
by Ed Tanton <n4xy@bellsouth.net>
- 18) [26645] Ultimate Paddle
by ka0yos@arn.net
- 19) [26646] F.S. Hitachi LCD Portable 'Scope

by Ed Tanton <n4xy@bellsouth.net>

20) [26647] Re: QRP-L Web Page?
by Steve Hideg <Steve.Hideg.1@nd.edu>

21) [26648] Re: Ultimate Paddle
by Ed Tanton <n4xy@bellsouth.net>

22) [26649] unsubscribe
by Juan Jimenez <"jimenezq@coqui.net"@coqui.net>

23) [26650] NorCal 40a design question
by "Craig B. Johnson" <johns516@maroon.tc.umn.edu>

24) [26651] Kits for technicians
by dwayne rich <drichff@worldnet.att.net>

25) [26652] Re: Radio and Scouts
by kb0rol@juno.com (Bradley L Mugleston)

26) [26653] Alaska News and Chat
by "Jim (AL7FS), Nancy (KL7NY) and Juliann (WL7MP) Larsen"
<larsennc@alaska.net>

27) [26654] FISTS Special Event
by Scott Bauer <ke3nv@erols.com>

28) [26655] Re: Buying a car
by K5BDZ@aol.com

29) [26656] Code Readers
by Jeff & Bea Hahn <jhahn@bellatlantic.net>

30) [26657] Re: Ultimate Paddle
by wb8ygg@juno.com (Bradley S. Mitchell)

31) [26658] Where are the new hams?
by Chris Cartwright <ccart@dns.vidtel.com>

32) [26659] Re: Code Readers
by Ed Tanton <n4xy@bellsouth.net>

33) [26660] Re: Ultimate Paddle
by "James R. Johns" <jrjohns@mitre.org>

34) [26661] Kits for technicians
by "L. Mark Pilant - MS:ZK03-4/Y02 DTN:381-1529" <pilant@seesaw.ENET.dec.com>

35) [26662] TT-515 Accessories(still looking)
by w8lrm@juno.com (Albert K. Rea)

36) [26663] Re: F Connector usage
by Greg Weinfurtner <weinfurtner@ouvaxa.cats.ohiou.edu>

37) [26664] Re: NN50CIA
by W3GX@aol.com

38) [26665] Re: Code Readers
by David.Reid@asml.nl (David Reid)

39) [26666] Schematic for Heath IP-18 Power Supply
by scicior@uswest.com (Steve Ciciora)

40) [26667] Re: Schematic for Heath IP-18 Power Supply
by Chris Cartwright <ccart@dns.vidtel.com>

41) [26668] Re: end fed half wave antenna
by jeverhar@camden.lmco.com

42) [26669] Re: ARRL, Scouts, and Amateur Radio
by Glenn Swanson <gswanson@arrl.org>

- 43) [26670] CQC Swaplist Update
by "Marshall Emm" <mgemm@mtechnologies.com>
- 44) [26671] Re: Kits for technicians
by Thomas Isgro <kc8dgu@postoffice.worldnet.att.net>
- 45) [26672] Re: Looking For Superhet Design Software
by Ed Pacyna <pacyna@auratek.com>
- 46) [26673] Possible Pacificon Confusion
by ki6ds@dpol.k12.ca.us (Hendricks, Doug)
- 47) [26674] marine VHF question
by wj5o@juno.com (William H. Hays)
- 48) [26675] Wavetek 27XT DOES NOT Measure Very Small Inductances
by "Martin, Lou (MCI)" <Lou.Martin@mci.com>
- 49) [26676] Re: OHR scaf vs RS DSP?
by Ricky McNelly <72507.235@CompuServe.COM>
- 50) [26677] Ten-Tec HF QRP comments?
by Russ - N5LT <russ@inetport.com>
- 51) [26678] Keyboard software
by Mike Broga <mbroga@cu-online.com>
- 52) [26679] Solar Flux is ...
by Larry Deering <ldeering@idt.net>
- 53) [26680] Re: OHR scaf vs RS DSP?
by wmcshan@REX.RE.ouhsc.edu (Mike McShan)
- 54) [26681] Re: Canadian Fox message decoded
by "Brian.Buydens@usask.ca" <buydens@duke.usask.ca>
- 55) [26682] Re: Ten-Tec HF QRP comments?
by "Paul R. Valko" <prvalko@Oakland.edu>
- 56) [26683] Re: RS DSP hacked ?
by Steven Weber <kd1jv@moose.ncia.net>
- 57) [26684] Re: F Connector usage
by Ed Loranger <we6w@qsl.net>
- 58) [26685] Re: Where are the new hams?
by Ed Loranger <we6w@qsl.net>
- 59) [26686] QRV in Newport, OR
by "Mark S. Adams" <msadams@acsu.buffalo.edu>
- 60) [26687] A couple of unusual transmatch questions
by "Robert W. Shaw" <lycott@fox.nstn.ca>
- 61) [26688] Re: Possible Pacificon Confusion
by Ed Loranger <we6w@qsl.net>
- 62) [26689] WTB: keyer and audio filter for MFJ 90XX transceiver
by "N4ELM" <n4elm@ipass.net>
- 63) [26690] Re: Code Readers
by "j.w. thornton" <dub@oklahoma.net>
- 64) [26691] Re: Wavetek 27XT DOES NOT Measure Very Small Inductances
by Chris Trask <ctrask@primenet.com>
- 65) [26692] Re: Canadian Fox message decoded
by Ed Loranger <we6w@qsl.net>
- 66) [26693] Active Band Pass Filters - Some staggering thoughts
by Ed Pacyna <pacyna@auratek.com>

67) [26694] Re: NorCal 40a design question
by torell@sicom.com (Kent Torell)
68) [26695] 17m QRP freq?
by "William R. Moore" <wr.moore@worldnet.att.net>

Date: Thu, 11 Sep 1997 16:08:58 -0700
From: Ed Loranger <we6w@qsl.net>
To: miker@comlinear.nsc.com
Cc: Low Power Amateur Radio Discussion <qrp-l@Lehigh.EDU>
Subject: [26628] Re: QRP-L Web Page?
Message-ID: <34187A0A.1604@qsl.net>
Mime-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

Try this: <http://qrp.cc.nd.edu/qrp-l/clubinfo.html>

I tried the default: <http://qrp.cc.nd.edu/qrp-l/>
but it didn't go to clubinfo.html so maybe that's it.

-Ed L.

--
72/73 de we6w qrp es cw ONLY (From non-ham to extra in one day!)
HW-8;OHR-100, Pixie2, Johnson Viking II w/VF0.
QRP-L#1068/ARCI#9397/Norcal#2227/ARS#275/AR#112 grid CM88ok
mailto:we6w@qsl.net <http://www.qsl.net/we6w>

Date: Thu, 11 Sep 1997 19:26:06 -0400
From: Ed Tanton <n4xy@bellsouth.net>
To: beache@juno.com
Cc: QRP-L Reflector <qrp-l@Lehigh.EDU>
Subject: [26629] Re: F Connector usage
Message-ID: <3.0.1.32.19970911192606.00ab6b30@mail.atl.bellsouth.net>
Mime-Version: 1.0
Content-Type: text/plain; charset="us-ascii"

Hi Ted... I just had to make a few comments related to yours...

Yes the cable companies do indeed use these outdoors all the time. Go out and look at the connections (at least those made by "media1") and what you will find is rotten braid where the poor connection seals have allowed water to destroy the braid. The last time I replaced mine, I had to back up six inches to find useable braid.

No offense, but your Daiwa-or the connections to it-were somehow screwed up. Daiwa uses coaxial cavities, and are far superior to ANY regular amateur switch available-much less a push-button RS switch.

I wouldn't run 100W through an F connector on a bet using solid state finals. The ONLY thing to recommend "F" connectors is that they are CHEAP. And OK... quick and easy. THAT's why the cable companies use them. They need to make hundreds-or even thousands-of connections a day, often using personnel having low experience. Do those factors make them preferable for amateur use? RG-8X is cheaper than RG-213... does that make it preferable? Not for long cable runs, higher frequencies, or higher power. You need to match the component to the task. I am not willing to part with dBs-even fractions-I can reasonably avoid losing, whether the loss is inherent to the connector, due to poor connections, or poorly designed devices or parts. Crimp BNCs and N's are readily available, and vastly superior to type "F". We hams are supposed to try and do things "right"... and we do not have to use cheap connectors... but we do have the time to learn to apply superior connectors-even if they are a bit more trouble.

I have never had more problems with intermittent connections on a test bench than with push-on RF connectors. They are pure junk... when I'm testing something, I prefer not to introduce any more problems than the ones I am already seeking. As to mixing 50 and 75 ohm cables, certainly you can do it, and certainly it is not going to matter a great deal with short cables, but what a poor practice that is. In an emergency, sure... but at any other time: awful.

I have no idea where you got your idea that PL-259 connectors are "RF lumps" compared to type "F"s but that is simply not true... or at least no worse a lump than most connectors in the first place. An engineer-now-professor friend of mine, while working McDonald-Douglas in the 80s, ran an extensive series of tests using a pretty good HP Network Analyzer from HF through a little over a GHz and found that the BNC connector was the prize winner OVERALL-despite many claims to the contrary for type "N"s. They even re-ran the results to be sure they were so surprised. (They did NOT run SMAs/etc. the idea was not to test at 'real' microwave freqs.) UHF (PL-259) actually did "about as well" as type "N"s through a higher frequency than I'm willing to quote.

Furthermore, about the "F": I will never condone the use of any connector in a hamshack-or anywhere else I have any control over the matter-where the center conductor relies on contact between a bare copper wire and another conductor. Copper oxide is not a conductor, and-sooner or later-it ain't gonna work.

Date: Thu, 11 Sep 1997 19:44:46 -0400 (EDT)
From: "Scott Rosenfeld [NF3I]" <ham@w3eax.umd.edu>
To: qrp-l <qrp-l@Lehigh.EDU>, eax@w3eax.umd.edu, forsale-swap@qth.net
Subject: [26631] FS: TT 405 amp, QRP, PS, HTs, ants, paddles, xvtr, QSTs, etc
Message-ID: <Pine.LNX.3.95.970911191025.2624B-100000@w3eax.umd.edu>
MIME-Version: 1.0
Content-Type: TEXT/PLAIN; charset=US-ASCII

Here we go...something for everyone...

Offers welcomed on everything.

This is what happens when I get to
post only once every other month :)

A&A Engineering 20m QRP rig, minus some ICs.
Excellent condition with manual. \$70.

El-Key by Poucel Electronics. Single paddle,
REALLY heavy black base with Chromed parts.
Lucite/plastic handles. Exc. condition.
A little bit of writing (- . COM) on the
contacts so the previous owner knew what
was what. \$70.

Bencher BY-1 paddles, in box. Basic black paddles,
sell new for \$85, asking \$60.

Ten-Tec Model 405 50w QRP amp! Works great!
50w for 1w in (80, 40, 20, 15, 10m, and likely
17 and 12m). No manual. Excellent condition
with a few scratches on the top case. \$220.

S&S Engineering ARK 20 QRP rig. 20m, with
electronic keyer, audio filter, built-in speaker,
5w output. Very rugged. Manual included,
along with FREE Ramsey linear amp (20w). \$275.

MFJ-9420 20m SSB radio, property of KA3RTE.
Excellent condition, with manual. 12w PEP. \$175.
Also have CW adaptor for said radio, \$30 or \$25 with radio.

Brand-new condition Radio Shack HTX-404 UHF HT.
16 memories, 430-450 MHz. \$140 with box, manual,
and all accessories.

ADI AT-200 2m HT, excellent condition. Low-power battery. 20 memories, extended freq. coverage. Box, manual, battery, charger, etc. Sells on closeout for \$149, asking \$110.

Yaesu FT-208R 2m HT with CTCSS board installed. No batt. Kinda rough, PTT switch broken, BUT comes with speaker-mic and NC-8 desk charger/operating stand, PLUS a battery adaptor and Pa-3 mobile adaptor. Ugly but works. \$90 takes all.

Radio Shack Pro-2039 desktop scanner. New condition in original box w/manual. 200 channels, public service/amateur/etc. Cell-blocked. Hyperscan. \$249 new, asking \$165.

Radio Shack Pro-2046 mobile scanner. Like new condition in original box w/manual. 100 channels, cell-blocked, etc. \$230 new, asking \$150.

Radio Shack Pro-51 handheld scanner, 9 months old. Like new condition. 200 channels, cell-blocked. Hyperscan, one-touch WX, service search, Hyperscan, etc. Box & manual. Lists for \$300, asking \$200.

JPS NIR-10 DSP audio filter. Great condition. Older firmware, with manual. \$135.

Autek QF-1A analog dual audio filter. Comes with built-in 120 VAC supply. Excellent condition with manual - \$52.

Ten-Tec model 1210 2m xverter kit, unbuilt. Was \$148 shipped from Ten-Tec, asking \$144 shipped. Box has yet to be opened. Can build to suit as well. Thinking of buying one from the factory?

Radio Shack Weatheradio, excellent condition in box. Runs on battery or 120 VAC. Alert feature. Model 12-140, asking \$15.

Outbacker Perth antenna - 80-10m with taps. Sells for \$289 new. With box & manual, used on a few trips in the Spring. \$195.

COMPLETE set of Hamstick antennas (80-6 meters). Never used. Sell for \$20 each new, asking \$15 each.

GC Electronics 3 amp regulated 12 VDC power supply.
5 amps surge. Small, with 5-way binding posts
on front panel. \$22.

Pyramid PS-25 25 amp 12vdc power supply. Not
beautiful, but works well, and has dual meters
(current & voltage). Voltage variable 10-15 VDC.
\$65.

TPL 2m 80w allmode amp. Excellent condition, with
manual. 18w input gives 80w output. \$100.

THS Electronics 1-10 2m Class C amp. 1 watt in,
10 watts out. Great physical shape, and comes
with fused power cable. Seems to like operation
at 5 watts output, although when first fired
up it puts out about 10. Thus it's got a problem.
Have schematic but little time; \$17.

MFJ-9040 40m QRP CW rig. Excellent condition,
with box, manual. Previous owner said there
was a problem with AGC, although I've not noticed
it. Asking \$110. Got a TAC-1 instead.

PROCEEDS FROM THE FOLLOWING GO TO THE MARYLAND
MILLIWATERS:

QST Magazines, \$1.00 each plus shipping:

1991 - All except May, June, July
1992 - All except February and July
1995 - All
1996 - All except April, June, December
1997 - January-July except February

A total of 46 magazines, all in good to
excellent shape. Buy one or all...

* Scott Rosenfeld NF3I Burtonsville, MD FM19mc QRV 80-10/6/2/440 *
*** 6m 80 grids worked on 8 watts *** HF 140 cfmd * QRP-L #147 ***
** QRP ARCI #9054 ** DXCC/WAS/WAC *** 100% dipole powered HF/6m **
* 301-549-1022 h / 301-982-1015 w *** Hamfest, life's simple joy *

Date: Thu, 11 Sep 1997 17:01:08 -0700
From: David Smith <qrp-dave@ocsnet.net>
To: QRP-L@Lehigh.EDU
Subject: [26632] QRP SSB
Message-ID: <B0001358199@ntserv1.ocsnet.net>
Mime-Version: 1.0
Content-Type: text/plain; charset="us-ascii"

Thanks, guys, for the wonderful answers. A vital part of QRP is operating skills, and your tips will help greatly. This is a great group! AGN, TNX and 73.

Dave

Date: Thu, 11 Sep 1997 23:58:59 +0000
From: Bob Roach <KE4QOK@worldnet.att.net>
To: qrp-l@Lehigh.EDU
Subject: [26633] Finding the Hams of the Future
Message-ID: <19970911235856.AAA15499@LOCALNAME>
Mime-Version: 1.0
Content-Type: text/plain; charset="us-ascii"

Please read, 73 and Thanks in advance.

This is probably off topic (technically) but well worth some consideration since it represents an opportunity to recruit many new, young hams. Having been a boy scout as a child I recently got to thinking that I might be able to get some young people interested in the hobby via the merit badge route. As it turns out this isn't very likely (the scouting program ain't what it used to be). While discussing this with a co-worker he mentioned a similar organization which is affiliated with the Assembly of God Church. The organization is called Royal Rangers and is very similar to how I remember scouting. My friend brought in a copy of their manual and in their merit awards is one for communications (I think that was the category). The thing that caught my attention was that, rather than requiring the boys to find out about amateur radio, the requirement is to learn the code and get a novice class license.

I was mentioning this to a friend on the local 2M repeater today and another ham whose kids participate in the program came on and volunteer to see about getting the group into our next novice/tech class.

If you are interested in doing this in your area you should be able to place a call to your local Assembly of God church to see if there is a group in your area.

(o o)
-----o00_()_00o-----
73 es TNX Advanced, W5YI VE, ARRL Member
KE4QOK KE4QOK@worldnet.att.net
Bob ke4qok@juno.com

136 Hermitage Road When the student is ready.....
Newport News, VA 23606 The teacher will appear.
(757)930-0348

Date: Thu, 11 Sep 1997 20:20:07 -0400 (EDT)
From: Chris Cartwright <ccart@dns.vidtel.com>
To: QRP Reflector <qrp-l@Lehigh.EDU>
Subject: [26634] Re: Pacificon: I'll Be there!
Message-ID: <Pine.LNX.3.93.970911201343.3659A-1000000@dns.vidtel.com>
MIME-Version: 1.0
Content-Type: TEXT/PLAIN; charset=US-ASCII

On Thu, 11 Sep 1997, Ed Loranger wrote:

> So..... WE6W will be seeing ya's.

Now all we have to do is get him, a laptop, cell modem, phone, and he can report all about ** IT **, immediately to the list, right from the floor of Pacificon! Maybe some ATV, gear to a linked repeater system... live video to a web page... hmmm...

But I think it will probably be "film at 11". Ed you lucky dog!

-- Chris Cartwright, Technical Engineer | ccart@vidtel.com --
-- N3XRV QRP WAS 17/9 (w/c) | ccart@erols.com --
-- QRP-L #655 NORCAL #1891 QRP-ARCI #???? | http://dns.vidtel.com/~ccart --
-- WIMPS Q's=04 30M=04 17M=00 12M=00 STATES=03/00/00 DX=00/00/00 QSL's=00 --

Date: Thu, 11 Sep 1997 20:40:22 -0400
From: "Bob Edwards, W4ED" <w4ed@flash.net>
To: qrp-1@Lehigh.EDU
Cc: "Ron Pace, AA4RP" <aa4rp@amsat.org>, "Ray Sanders, KS4EG" <ray.chris.sanders@juno.com>
Subject: [26635] Re: Zo of 18ga zip cord??
Message-ID: <34188F76.93@flash.net>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

Niel Skousen wrote:

> Anybody know the line impedance of 18ga zip/speaker 2-wire cable

Ya Niel, anywhere from 100 to 140 ohms, depending on insulation material spacing between conductors, amount of insulation in the cross-section, tide level on hour of manufacture, etc. I measured one 110 VAC zip cord & got 105 ohms and another #18 ga speaker wire at 112 ohms.

Best thing is to measure it yourself & hope it doesn't change over time. ARRL ant handbook has techniques for this, as well as ant/SWR analyzers like Autek RF Analyst & MFJ, etc. Keep in mind that this family of transmission line is very lossy compared to coax or TV twin lead. Also the RF impedance can vary from batch to batch since they are only interested in 60 Hz AC performance.

I needed some 150 ohm for the feeder within an LPDA section and found some # 16 ga "heavy duty speaker wire" at a Best Buys, that had just the right amount of spacing & material to hit 140 ohms. I thing the marketing dept told their designers to make it look big and shinny with insulation but put as little copper in it as possible. It worked for me.

The lowest I have found is 97 ohms, a #12 ga speaker wire that is closely spaced and has very little insulation material in the overall cross-section, from Home Depot.

--

Bob 72/73

<http://www.qsl.net/w4ed>
W4ED nr Atlanta @EM73wt

...."QRP", more from less....

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Date: Thu, 11 Sep 1997 20:58:10 -0400  
From: "Bob Edwards, W4ED" <w4ed@flash.net>  
To: qrp-1@Lehigh.EDU  
Subject: [26636] Re: Zo of 18ga zip cord??  
Message-ID: <341893A2.559F@flash.net>  
MIME-Version: 1.0  
Content-Type: text/plain; charset=us-ascii  
Content-Transfer-Encoding: 7bit

Neil,

Also, propagation factors ranged from .66 to .76

You'll need to measure this too, for some applications.

--

Bob 72/73

<http://www.qsl.net/w4ed>

W4ED nr Atlanta @EM73wt

...."QRP", more from less....

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Date: Thu, 11 Sep 1997 18:03:25 -0700 (PDT)  
From: Bob Okas <vintage@best.com>  
To: Joe Gervais <vole@primenet.com>  
Cc: qrp-1@lehigh.edu  
Subject: [26637] Re: W9GR DSP-3 vs Timewave?  
Message-ID: <Pine.SGI.3.95.970911164645.14902A-100000@shellx.best.com>  
MIME-Version: 1.0  
Content-Type: TEXT/PLAIN; charset=US-ASCII

Hi Joe,

Your message made me go check out Quantics' home page as well as the Timewave DSP 9+. Here's what I've determined. For all but the most critical, demanding situations, the W9GR filter will probably do just fine. It has 13-bit A/D and D/A converters, which means the quantization is not CD-quality. But neither is HF!. The Timewave DSP9+ claims 16 bits of A/D and D/A. In theory, this will lower internally generated noise by 18dB. It also enables the front end to resolve more "steps" in the input waveform, so the CW sig can be buried deeper in the noise and still be pulled out. You'll have to decide for yourself on this point. A demo is definitely

mandated!

The price difference between the two is \$20.00 (W9GR w/case). If you like to solder, I'd say go for it. If you're really fussy (like I can be sometimes) and demand the best specs, go for the Timewave. Allow me to relate a personal experience.

I implemented a Widrow-Hoff LMS filter (noise reducer) a few years ago on a floating-point DSP that used an 8-bit A/D and D/A converters. The converters used mu-law encoding, which gets about 12 bits of performance from 8-bits of digital representation. Everytime you use the phone, you're experiencing mu-law 'non-linear' encoding. The DSP used 24 bits of mantissa, so any audible limitations would be caused by the converters and not the filter mathematics. As a test of the software's performance, I played back some SSB and CW stuff I taped off 80m (it was summer at the time). In all cases, the converter noise was not noticable, since the atmospherics, etc. overpowered any locally generated noise. The filter worked darned good, just like the .WAV files in the Quantics home page. As an aside, the only major difference between de-noiser and heterodyne remover algorithms is where you take the output!

More recently, I'm in the process of developing a homebrew rig with a DSP in the IF. The DSP evaluation board I bought claims to have 16 bit A/D and D/A's. Guess what? I can only get about 14 bits worth of dynamic range between saturation and the noise floor. It still works well enough, though!

I know I've rambled on. Let me leave you with a few last thoughts. The W9GR is customize-able, the Timewave DSP-9+ isn't. This might be important if you're a builder. Performance will probably be equal, but the DSP9+ might win out in the \*really\* tough condx. What I have not ever seen is a definitive "shootout" between the various DSP filter boxes. You should try both out if possible.

The military has a test called a "DRT" which tests various speech enhancement techniques. Humans are used to determine whether the cleaned-up comms they heard was "Fire", or "Tire". Given enough subjects, a statistical average can be obtained to determine which technique is better. It would be an interesting psycho-acoustics grad student project to conduct such a study using CW. Know any grad students looking for a dissertation subject?

Well, enough already. Whew!

Bob - W3CD

On Thu, 11 Sep 1997, Joe Gervais wrote:

>  
> Howdy Folks,  
>  
> Thanks to whoever posted the info on the W9GR DSP-3 unit  
> (info at <<http://www.oro.net/~w9gr>). I'll track down the  
> August '95 issue of QST for the review, but are there  
> any current owners on the List?  
>  
> I'm wondering how the DSP-3 (\$149 + S/H) compares to  
> the low-end Timewave DSP boxes. Bear in mind that I only  
> operate CW (nothing against the other modes, just my  
> personal preference) so performance on CW sigs is critical.  
> But I'm cheap as tinfoil, so price may win out. :-)  
>  
> Are we talking night-and-day differences here? Or perhaps  
> a marginal improvement in copy? (Yes, I'll download the  
> .WAV demo files, but I always like to hear from actual  
> users.)  
>  
> Price seems right, kit looks easy enough to build, and I've  
> always wanted a good DSP to cut through the QRN/QRM. Can't  
> work 'em if ya can't hear 'em! I want to be able to track  
> down K8ML and his 10mW sig. :-)  
>  
> Cheers de AB7TT,  
>  
> -Joe, vole@primenet.com, AZ ScQRPions (Phoenix)  
>  
> "Veni Vertical Vamos - I came, I radiated, I left". -AB7TT  
>  
>

-----  
Date: Thu, 11 Sep 1997 20:04:36 -0500 (CDT)  
From: Addi Pittman <cornea@vsta.com>  
To: qrp-1@lehigh.edu  
Subject: [26638] end fed half wave antenna  
Message-ID: <199709120104.UAA07399@rivendell.vsta.net>  
Mime-Version: 1.0  
Content-Type: text/plain; charset="us-ascii"

Does anyone out there have experience with the end fed antenna that the rainbow tuner requires. Im not clear on how to build this antenna. Is it fed with coax? How does it wor

Thanks, kBob KC5HLO

-----  
Date: Fri, 12 Sep 1997 01:01:13 +0000  
From: Sandy W5TVW <ebjr@worldnet.att.net>  
To: n4xy@bellsouth.net, qrp-1@lehigh.edu  
Subject: [26639] Re: F Connector usage  
Message-ID: <19970912010111.AAA24425@LOCALNAME>  
Mime-Version: 1.0  
Content-Type: text/plain; charset="us-ascii"

I couldn't agree more with N4XY!

The "F" connector is a cheap abortion. "Cox" cable here sometimes coats them with "Scotchkote" which helps prevent the ingress of water some. If you are looking for a "cheap" connector that is actually quite good at RF (Don't laugh!) the old common RCA 'phono' connector is a good one. You have to be picky as some made are good and some poor (just like PL-259's!) They are no good outside though unless you wrap them with something that will waterproof them! (Again, not unlike PL-259's)

Best thing I have found to preserve a PL-259 or any other connector outside is a couple of layers of stretched Scotch #23 Rubber splicing tape. It will completely waterproof them and is easy to cut off if you need to with no messy, gooey gummy mess. Don't rely on any plastic tape to do this job as it won't, no matter what the manufacturer claims! (Years in the ship/marine environment have proven this!)

At VHF and UHF the "N" connector is the ONLY thing to use that is constant impedance, reasonable waterproof and won't "leak" RF energy. I prefer the "captivated contact" "N" connectors (UG-1185/U I believe).

I'd forget the "F"s for sure!

73,

E. V. Sandy Blaize, W5TVW

"Boat Anchors collected, restored, repaired, traded and used!"

417 Ridgewood Drive,

Metairie, LA., 70001

ebjr@worldnet.att.net

\*\*Looking for: Hallicrafters SR-75 Transceiver\*\*

\*\*RK-34(VT-224) tubes, Butternut HF2V antenna\*\*

-----  
Date: Thu, 11 Sep 1997 18:13:33 PDT  
From: "Ray Dennis" <w0dq@hotmail.com>



To: qrp-1@Lehigh.EDU  
Subject: [26640] Re: Zo of 18ga zip cord??  
Message-ID: <19970912011333.20651.qmail@hotmail.com>  
Content-Type: text/plain

I doubt that it makes a whole lot of difference what you use on such low frequencies. It sort of falls in the same category as the "paranoia" over high SWR. If you can get something metallic up in the air, and get the transmitter to load it, you will get out.

Now, try it on the higher bands, and the story might be quite different.

Ray W0DQ

---

Get Your Private, Free Email at <http://www.hotmail.com>

---

Date: Thu, 11 Sep 1997 21:45:49 -0400  
From: "Watson R Gabriel Jr" <wgabriel@duke-energy.com>  
To: jwatrous@groucho.santarosa.edu, qrp-1@lehigh.edu  
Subject: [26641] Re: Ex-scouts and qrp  
Message-ID: <85256510.00091697.00@dpcmail.dukepower.com>  
Mime-Version: 1.0  
Content-type: text/plain; charset=US-ASCII

Yea, sure did. I thought I remembered that all scouts had to learn the morse code to get either the 2nd or 1st class rank. Can't remember for sure though. One nice thing - sure is tuff to send 20wpm with flags!!!! Did not have to ask for QRS!

Lets, see -- dit on the right/dah on the left (sender perspective) if I remember correctly. Right? It's been a long time ago.

left-left-left-left      left      left  
(hint - to the rcvr!)

Watson/WB4EXW

...Me too! How come we never picked up semiphore? Did anyone?  
Life Scout in 1956...  
John Watrous, K6PZB

-----  
Date: Thu, 11 Sep 1997 22:09:51 EDT  
From: tahrens1@juno.com  
To: qrp-l@lehigh.edu  
Subject: [26642] Sierra - Low power on 20  
Message-ID: <19970911.211004.4919.1.tahrens1@juno.com>

Hi Folks, well, I have lost my list of mods to the Sierra to bring up the power. On my last one, I only did one of the mods (changing the inductor in the collector of the final), and it made the most difference. But, I have lost my mod sheets, and don't remember how many turns before the tap, etc.

could somebody just tell me that mod?

Thanks a bunch!

Tim W5FN

p.s. I get almost 3 watts on 40 & 30, but a tad less than 1 watt on 20. I'd like to get 3 out on 20.

-----  
Date: Thu, 11 Sep 1997 22:24:52 -0400  
From: Jim Francoeur KC1FB <jim\_kc1fb@pipeline.com>  
To: qrp-l@Lehigh.EDU  
Subject: [26643] Re: Sideband QRP -Reply  
Message-ID: <1.5.4.32.19970912022452.006ab92c@pop.pipeline.com>  
Mime-Version: 1.0  
Content-Type: text/plain; charset="us-ascii"

Paul,

Until I started building every QRP CW kit being touted by our favorite list, I was a SSB QRPer. When I got back into Ham Radio after 25 years I tried low-power SSB, since I never used it much in my previous Ham life, and I

used the mindset that if I could hear them at S3 or better I could contact them. This turned out to be absolutely true. I wasn't able to have a lot of "rag Chews", but I found that with about 3-5 Watts of very highly speech processed SSB (using a ARGO 509 and a MFJ-520BX II) I broke into many pileups, and after I was really confident, I never signed QRP.

QRP SB WORKS, and when the cycle starts up...try it on 15M(my favorite) and 10M(the best! when open for QRP SSB)

But don't forget that the FOX is going to be running in just a few weeks....and we must give chase.

72/73,

Jim

>I borrowed a MFJ-9420 a few weeks ago to try ssb  
>qrp. I connected it to a G5RV through a MFJ 941e  
>tuner. I heard a small pile-up on the IOTA freq.,  
>14.260. My first call with the rig got me through the  
>pile-up and netted me a 56 from Pea Island, NC  
>from my qth in Maine.

>

>QRP SSB works.

>

>73, Paul

>

>

>

-----  
-----  
Jim Francoeur KC1FB Norwalk,CT QRP-L #29

-----  
  
Date: Thu, 11 Sep 1997 23:46:44 -0400  
From: Ed Tanton <n4xy@bellsouth.net>  
To: QRP-L Reflector <qrp-l@Lehigh.EDU>  
Subject: [26644] F.S. Daiwa Wattmeter  
Message-ID: <3.0.1.32.19970911234644.00af34a0@mail.atl.bellsouth.net>  
Mime-Version: 1.0  
Content-Type: text/plain; charset="us-ascii"

I have a like-new / virtually unused Daiwa DP-810 HF-150MHz digital wattmeter for sale. MIN is below a watt in 10ths. Price is \$165.00 shipped CONUS.





Content-Type: text/plain; charset="us-ascii"

It's back. The first game in the newly expanded Notre Dame football stadium created a major plumbing failure that caused flooding of the building where my basement office (and the web server) were. We had to evacuate the basement, which meant moving the server. It's back up, running in my temporary office.

--Steve

At 4:08 PM -0700 9/11/97, Ed Loranger wrote:

>Try this: <http://qrp.cc.nd.edu/qrp-l/clubinfo.html>

>

>I tried the default: <http://qrp.cc.nd.edu/qrp-l/>

>but it didn't go to clubinfo.html so maybe that's it.

>

>-Ed L.

>--

>72/73 de we6w qrp es cw ONLY (From non-ham to extra in one day!)

>HW-8;OHR-100, Pixie2, Johnson Viking II w/VF0.

>QRP-L#1068/ARCI#9397/Norcal#2227/ARS#275/AR#112 grid CM88ok

>mailto:we6w@qsl.net <http://www.qsl.net/we6w>

---

Steve Hideg, N8HSC/9

QRP-L #136

Check out the Internet QRP Club's site on the WorldWide Web:

<<http://qrp.cc.nd.edu/QRP-L/>>

-----  
Date: Fri, 12 Sep 1997 00:09:52 -0400

From: Ed Tanton <n4xy@bellsouth.net>

To: ka0yos@arn.net

Cc: "Low Power Amateur Radio Discussion" <qrp-l@Lehigh.EDU>

Subject: [26648] Re: Ultimate Paddle

Message-ID: <3.0.1.32.19970912000952.00b2a100@mail.atl.bellsouth.net>

Mime-Version: 1.0

Content-Type: text/plain; charset="us-ascii"

I think you get find a Mercury Paddle-or talk to Dan's widow to buy the plans-and make one just like it!!!

At 11:59 PM 9/11/97 -0500, ka0yos@arn.net wrote:

>How would you build the ultimate paddle? A friend of mine who is a very



-----  
Date: Thu, 11 Sep 1997 23:14:33 -0500  
From: "Craig B. Johnson" <johns516@maroon.tc.umn.edu>  
To: <qrp-1@Lehigh.EDU>  
Subject: [26650] NorCal 40a design question  
Message-ID: <3418c2810453002@mhub2.tc.umn.edu>  
MIME-Version: 1.0  
Content-Type: text/plain; charset=ISO-8859-1  
Content-Transfer-Encoding: 7bit

I have been studying the textbook put out by Professor Rutledge at Cal Tech (and Wayne Burdick) which details the design of the NorCal 40a transceiver. What a terrific book! It goes through lots of detailed mathematical derivations of electronic circuits as well as radio circuits in general, and then uses the NorCal 40a as a specific example. The EE students in this

EE20 course build the NorCal 40a as their lab project, measuring and calculating values as they go. For \$20 I think this book is a GREAT educational bargain.

(Thanks for telling us about it here, Wayne!) Anyone that wants details about ordering it, let me know and I can pass the info on.

I have been trying to dust off the cobwebs to do some of the calculations. I have one specific example that hopefully may be of general interest to discuss here. If this works, there are many more similar items that would be fun to discuss.

The NorCal 40a has a crystal filter in the receiver portion, between the mixer and the and the product detector. (Both the mixer and product detector are Ne602a's.) The crystal filter is designed to have an input impedance of 200 ohms and an output impedance of 200 ohms. However, this has to match up to the Ne602a detector which looks like a high impedance (1500 ohm resistance shunted by 3 pF of capacitance).

The problem is to design the matching network consisting of a series inductor, L4, and a shunt capacitor, C14.

OK, the answer is already here, but we should be able to see how the math works, right? To see if Wayne picked the right values! :-)

I am be really missing something. Probably very trivial, but I "need to know".

OK?





we should "see" 200 ohms impedance (to ground) in both directions. Right?

I would like to use the suggested values of L4 and C14 and hopefully calculate somewhere near 200 ohms of impedance. (The actual values are used are based upon parts availability, of course. Students are asked to calculate the the "exact" values that they would pick if they if they could.)

OK, here is my approach:

First, for the inductor,

$$X_L = 2 \pi F L = (6.28)(4.91 \times 10^6)(18 \times 10^{-6}) = 555 \text{ ohms}$$

(This phase angle is +90 degrees)

Now I would combine C14 and the Ne602a capacitance, to give an equivalent of 50pf.

At 4.91 Mhz, Xc would be:

$$X_c = \frac{1}{2 \pi F C}$$
$$= \frac{1}{(6.28)(4.91 \times 10^6)(50 \times 10^{-12})}$$
$$= \frac{1}{.001541} = 650 \text{ ohms}$$

Now, to combine the Xc and R, using the formula for parallel circuits,

$$Y^2 = G^2 + B^2 \quad (\text{where } Y = 1/Z, G = 1/R, \text{ and } B = 1/X)$$

$$Y = \text{SQRT}((1/1500)^2 + (.001541)^2)$$
$$= .01679$$

so  $Z = 1/Y = 595$  ohms and phase angle is  $\arctan(B/G) = -66$  degrees

Now, do I add these two parts (vectors), because they are in series?

$$555 \text{ (with angle } +90) + 595 \text{ (with angle } -66) = ??$$

Do I really need to do this calculation? I think I'm really lost in the weeds!

OK, where did I go wrong? Pleeeeze.

- Craig, AA0ZZ

-----  
Date: Thu, 11 Sep 1997 23:45:33 -0400  
From: dwayne rich <dritchff@worldnet.att.net>  
To: Low Power Amateur Radio Discussion <qrp-l@Lehigh.EDU>  
Subject: [26651] Kits for technicians  
Message-ID: <3418BADD.18BE@worldnet.att.net>  
MIME-Version: 1.0  
Content-Type: text/plain; charset=us-ascii  
Content-Transfer-Encoding: 7bit

My fiancée has become interested in ham radio and wants to know if there are any kits that she could build to get on the air once she gets her no code tech ticket? SHE has a desire to build rather than buy a rig. Building things shouldn't be a problem for her as she has a masters in electrical engineering. My only concern with her getting her license is that I will have to share radio time <grin>. Can anyone point me in the direction of kits to build?

-----  
Date: Fri, 12 Sep 1997 00:56:40 EDT  
From: kb0rol@juno.com (Bradley L Mugleston)  
To: brian@ams-i.com  
Cc: qrp-l@Lehigh.EDU  
Subject: [26652] Re: Radio and Scouts  
Message-ID: <19970911.215217.6839.0.kb0rol@juno.com>

Brian,

Jade products makes a key/practice osc kit. I had my son building one at last years JOTA, got a lot of interest going. I don't know how many it sold but I hope it did.

Your results with the radio and astronomy badges are what I would expect BUT at a week of camp they can pass off both w/o any problems. If there was a radio available for use (day and night) not only would they go for the hook but they would get so involved they would come back for more - and possibly continue at home Especially if they built a little receiver at camp (one that worked when it was at home).

I'll keep working on my small group but wish it could get to camp.

Brad

On Mon, 8 Sep 1997 08:23:13 -0500 Brian Cieslak <brianc@ams-i.com>  
writes:

>I beleive the code practice osc. project in the merit badge book is  
>availabel from FAR electronics.

>

>I have been running a Jamboree on the air station for several years  
>now

>with a good turn out. I even issue the merit badge card with the visit  
>to a ham station requirement ( iI don't recall the element) signed  
>off.

>I get patches for all that visited and gather up the QSL's I received  
>for each scout and present them at parent/scout dinners (to make a big  
>deal of it). But not one has come back to finish off the badge. When  
>I

>discussed this with some leaders and parents I was surprised by what  
>they said. "Its not a required badge for Eagle scout so they won't  
>waste

>their time on it. they'll only choose whats required."

>

>I've had the same result with the astronomy merit badge.

>

>Brian AE9K

>-----

>Brian Cieslak

>Project Engineer

>-----

>Adaptive Micro Systems

>Milwaukee, Wisconsin

>

-----

Date: Thu, 11 Sep 1997 21:47:35 -0800

From: "Jim (AL7FS), Nancy (KL7NY) and Juliann (WL7MP) Larsen"  
<larsennc@alaska.net>

To: qrp-1@Lehigh.EDU

Subject: [26653] Alaska News and Chat

Message-ID: <3418D777.6CB4@alaska.net>

MIME-Version: 1.0

Content-Type: text/plain; charset=us-ascii

Content-Transfer-Encoding: 7bit

Alaska Info: Newsletter also has listing of Alaska nets if you are looking for Alaska.

73, Jim, AL7FS

=====

Subject: SCRC Newsletter

Greetings one and all.

The September South Central Amateur Radio Club News is up on the web site at:

<http://www.servcom.com/worcester/scrc.htm>

If you haven't tried the chat page yet, give it a go sometime. I understand that there are a few people who get on there around 8:00 am Alaska time quite frequently.

The chat page can be accessed through the home page, or directly at:

<http://www.servcom.com/worcester/chat.htm>

73 - Len - WL7IM

-----

Date: Fri, 12 Sep 1997 02:12:30 -0400  
From: Scott Bauer <ke3nv@erols.com>  
To: qrp-1@Lehigh.EDU  
Subject: [26654] FISTS Special Event  
Message-ID: <199709120612.CAA22419@smtp3.erols.com>  
Mime-Version: 1.0  
Content-Type: text/plain; charset="us-ascii"

> Hi Everyone!

Listen for FSE/W3DV/QRP this weekend on the QRP freqs  
and on the Fists freq, 058 on 15, 20 and 40 meters.  
W3DV, Woodwardville ARC ( The WARC ) will be operating  
QRP as usual and look forward to hearing from all of you.  
See below for the whole shebang.

72, Scott W3CV

>

>FISTS CW Club is celebrating our 10 year anniversary with a Special  
>Event that starts 0001Z Friday Sept 12 thru 2359Z Sunday Sept 14.

>This translates to 8:01pm Eastern Thursday, thru 7:59pm Eastern  
>Sunday.  
>  
>Each FISTS member can operate as a Special Event station from their  
>own home, calling CQ FSE (for FISTS Special Event). Special  
>commemorative QSL cards will be sent to those contacting the FISTS  
>stations. QSL with SASE to the station(s) you contact.  
>  
>Please join us in celebrating our anniversary and work as many FISTS  
>stations as you can! A certificate will be sent to the top three QRO  
>and the top three QRP (5 watts or less) stations who work the most  
>FISTS. Send logs by October 14 to Nancy WZ8C, Box 47, Hadley MI  
>48440-0047.  
>  
>Visit our Web page at <http://www.FISTS.org>  
>"When You've Worked a FISTS, You've Worked a Friend"  
>  
>  
>

-----  
Date: Fri, 12 Sep 1997 02:44:52 -0400 (EDT)  
From: K5BDZ@aol.com  
To: grudin@pacific.vdbs.com, qrp-1@Lehigh.EDU  
Subject: [26655] Re: Buying a car  
Message-ID: <970911172034\_228412299@emout16.mail.aol.com>

I remember about 10 years ago when a ham had problems with RF shutting down  
his Suburu. Suburu's answer? "Shield your antenna!"  
Haven't looked at a suburu since.  
FYI to all  
Bill  
K5BDZ

-----  
Date: Fri, 12 Sep 1997 04:34:09 -0400  
From: Jeff & Bea Hahn <jhahn@bellatlantic.net>  
To: qrp-1@Lehigh.EDU  
Subject: [26656] Code Readers  
Message-ID: <3418FE81.6A4A@bellatlantic.net>  
MIME-Version: 1.0  
Content-Type: text/plain; charset=iso-8859-1  
Content-Transfer-Encoding: 8bit

Greetings to one and all:

Recently someone posted the suggestion that one way to learn high speed code was to use a code reader as a backup. I have decided that this approach makes sense for me so I am beginning my shopping . So far I have been able to identify two suppliers: MFJ and Microcraft Corp.

I would appreciate hearing from who has information/suggestions on the following:

1. Names and addresses of other suppliers;
2. Product recommendations, reviews and comparisons;
3. Suggestions on features I should consider (e.g. built in LCD vs. reader attached to computer, etc.);
4. Operating suggestions; and
5. Any other information you consider useful.

Thanks for your help.

Jeff Hahn, KR4YS  
Great Falls, VA

-----  
Date: Fri, 12 Sep 1997 06:52:09 -0400  
From: wb8ygg@juno.com (Bradley S. Mitchell)  
To: qrp-l@Lehigh.EDU  
Subject: [26657] Re: Ultimate Paddle  
Message-ID: <19970912.065210.12638.0.WB8YGG@juno.com>

I just ran across an article by Steve Nurkiewicz wa2ybr.

April, 1968 QST.

It shows suggestions on using magnets in bugs, and then finally on the last page of the article, it shows a crudely polished version that looks like the Mercury paddle to me .

Is this the guy that just passed away that did the Mercury paddles, or just an un sung inventor?

73 Brad WB8YGG

-----  
Date: Fri, 12 Sep 1997 07:16:22 -0400 (EDT)  
From: Chris Cartwright <ccart@dns.vidtel.com>  
To: QRP Reflector <qrp-l@Lehigh.EDU>  
Subject: [26658] Where are the new hams?  
Message-ID: <Pine.LNX.3.93.970912065824.425C-1000000@dns.vidtel.com>  
MIME-Version: 1.0  
Content-Type: TEXT/PLAIN; charset=US-ASCII

Right here! On the air! I was at the G-Burg hamfest this weekend and took a break to cruise around the Novice bands. There was a nice 559 7wpm CQ from KE4WCTon 7.116. I answered and got back the usual RST, QTH and such. A little rough, but hey, this is the Novice band right? I send my info, and asked for a repeat on the QTH, trying to keep good timing going that slow (Did I say that!?) And the reply was the QTH again, and "MY AGE IS 9 YEARS". I have to admit that when I copied the '9' I was waiting for the next number. The 'Y' threw me a bit, but at 7 wpm I was sure that was what he sent. It took a while, and the QSB got us before we could really finish up. But it was a good contact, all the requireds exchanged, just the chat got shortened.

The kicker? He's a T+ who's had his ticket for over 2 1/2 years! So every once in a while, add 100Khz to the VFO, slow down and work a new one. This is one of my all-time favorite contacts, the card is going right up there next to the one from my first CW QSO. So, how many out there have worked ages with a single digit? The youngest? 72, gotta run, I have a card I have to get out :)

-- Chris Cartwright, Technical Engineer | ccart@vidtel.com --  
-- N3XRV QRP WAS 17/9 (w/c) | ccart@erols.com --  
-- QRP-L #655 NORCAL #1891 QRP-ARCI #???? | http://dns.vidtel.com/~ccart --  
-- WIMPS Q's=04 30M=04 17M=00 12M=00 STATES=03/00/00 DX=00/00/00 QSL's=00 --

-----  
Date: Fri, 12 Sep 1997 07:47:14 -0400  
From: Ed Tanton <n4xy@bellsouth.net>  
To: jhahn@bellatlantic.net  
Cc: QRP-L Reflector <qrp-l@Lehigh.EDU>  
Subject: [26659] Re: Code Readers  
Message-ID: <3.0.1.32.19970912074714.00a3fda0@mail.atl.bellsouth.net>  
Mime-Version: 1.0  
Content-Type: text/plain; charset="us-ascii"





Mime-Version: 1.0  
Content-Type: text/plain; charset="us-ascii"

Steve Nurkiewicz was the master craftsman that manufactured the Mercury key. I have one and it will go with me to the grave. It is a work of art (and I have several sets of plastic tabs in "designer" colors to go along with it). Steve will be greatly missed by the CW community.

Jim Johns KA0IQT  
jrjohns@mitre.org

-----  
Date: Fri, 12 Sep 97 08:29:53 EDT  
From: "L. Mark Pilant - MS:ZK03-4/Y02 DTN:381-1529" <pilant@seesaw.ENABLE.dec.com>  
To: qrp-l@Lehigh.EDU  
Cc: pilant@seesaw.ENABLE.dec.com  
Subject: [26661] Kits for technicians  
Message-ID: <9709121229.AA18036@us2rmc.zko.dec.com>

Check out Ten-Tec T-kits. They offer 6m and 2m FM rig kits for about \$200.00 if I remember correctly. They have a web page:

<http://www.tentec.com/>

I built their 2m -> 6m transverter to get on 6m. It was pretty easy to build and the instructions were also pretty good.

73

- Mark N1VQW

-----  
Date: Fri, 12 Sep 1997 08:44:24 edt  
From: w8lrm@juno.com (Albert K. Rea)  
To: qrp-l@Lehigh.EDU  
Subject: [26662] TT-515 Accessories(still looking)  
Message-ID: <19970912.084427.7063.3.w8lrm@juno.com>

Hi gang

I am still looking for the Black (ro Charcoal) calibrator that went with the TT-515. I now have the cw filter and power supply. Also interested in an original microphone and antenna tuner if there was such.

Thanks and 72....de.....

Al W8LRM  
St Joseph, Michigan  
on Michigans Sunset Coast

-----  
Date: Fri, 12 Sep 1997 08:52:51 -0400  
From: Greg Weinfurtner <weinfurtner@ouvaxa.cats.ohiou.edu>  
To: qrp-l@Lehigh.EDU  
Subject: [26663] Re: F Connector usage  
Message-ID: <v03110701b03ee4dce372@[132.235.72.186]>  
MIME-version: 1.0  
Content-type: text/plain; charset="us-ascii"  
Content-transfer-encoding: 7BIT

Hi all,

Can't agree more with Ted, F connectors have a place. Like any other connector, don't try to use it for what it is not capable of doing. (Common ham characteristic fault...haha! I'm just as guilty, trying to lift up a 2 meter antenna up the tower by the rg/59, when the rope I was using fell...the F connector pulled out and it was back to the garage for repairs....but that is another story) I've used F connectors on 2 meter beams, long runs for a 160 meter receiving loop and patch cables for every frequency in between.

One handy tip...If you run out of the crimp rings I found that a 5/16 nut will slip over the cable before you shove on the F connector. Then it can be tightened, just like it was on a bolt, upon the connector just with a small wrench, making a good connection. It may not be purty but it works!

73 de NS80

>

>I have followed the thread on using 75-ohm cable and catv type F  
>connectors with interest. My .02 worth is that the F connector truly has  
>a place in anyone's hamshack. I bought a supply of the 50-ohm RG58 style  
>connectors from Digikey, and found a commercial ratchet style crimper at  
>a hamfest. Don't use the simple plier type except in an emergency. Vise  
>grips will also work in an emergency.  
>Ted -- K4MKX  
>NORCAL #2213 -- QRP ARCI #8970 -- QRP-L #1149

-----  
Date: Fri, 12 Sep 1997 10:12:50 -0400 (EDT)  
From: W3GX@aol.com  
To: qrp-1@Lehigh.EDU  
Cc: w6toy@pop.erols.com  
Subject: [26664] Re: NN50CIA  
Message-ID: <970912101020\_-1533671056@emout08.mail.aol.com>

I'll bet NN50CIA is the only special event station that will send you a QSL card that, instead of confirming your contact, will simply say "We were never here." (Apologies to Tom Clancy in Hunt for Red October.

-----  
Date: Fri, 12 Sep 1997 12:33:11 +0200  
From: David.Reid@asml.nl (David Reid)  
To: jhahn@bellatlantic.net  
Cc: qrp-1@Lehigh.EDU  
Subject: [26665] Re: Code Readers  
Message-ID: <199709121033.MAA22843@wspub002.asml.nl>

Jeff wrote:

>I would appreciate hearing from who has information/suggestions on  
>the following:

- >1. Names and addresses of other suppliers;
- >2. Product recommendations, reviews and comparisons;
- >3. Suggestions on features I should consider (e.g. built in LCD vs. reader attached to computer, etc.);
- >4. Operating suggestions; and
- >5. Any other information you consider useful.

>Thanks for your help.

check out an AEA PK232 - it does loads more than just CW - but is the best decoder I have ever seen. It uses a computer ( anything with a dumb-terminal program running on it - even that old door-stop 8086 PC will work FB)  
It can send and recieve in CW ASCII RTTY FAX AMTOR and is really easy to use.

Mine sits in the shack connected to the TS850SAT and the computer was an old 80286 laptop with a 20MB hard disc... the computer sits on top of the pk232 and just decodes morse - at higher speeds.

Other units I tried before just couldn't cut it at QRQ... but the PK232 works better - up to about 65 wpm then it starts to fail.

all good fun eh?

73 de Dave  
PA3HBB / G0BZF

-----  
Date: Fri, 12 Sep 1997 08:13:06 -0600  
From: scicior@uswest.com (Steve Ciciora)  
To: qrp-1@Lehigh.EDU  
Subject: [26666] Schematic for Heath IP-18 Power Supply  
Message-ID: <199709121413.IAA24559@sp5-316.uswc.uswest.com>  
Mime-Version: 1.0  
Content-Type: text/plain; charset=us-ascii  
Content-Transfer-Encoding: 7bit  
Content-Md5: 4I2/l0tjF7/00yK0FrIKRg==

Sorry I can't help with your p.s., but why is it that people lie to your face at ham fests? In Gathersburg, I picked up a sony cordless phone for \$5, expecting it to be broken (it was). Didn't ask if it worked, didn't haggle over the price. The young girl (about nine) volunteered that it worked, but she doesn't use it any more. The previous owner knew it didn't work; they didn't put all the screws back after taking it apart. I also spent \$40 on a kenwood 2m mobile rig. Came with no power cord or mike. I asked where the mike was, the boy (mabe about 14) said it didn't come with one when he bought it, but it works, they only used it for receiving and not transmitting. Interesting, because when I give it power, it only transmits, it doesn't receive!

I'm not complaining that the above were broken, because I bought them expecting them to be broken (at the above prices). I didn't care or ask if they worked, but both people were more than willing to lie about it.

I won't even give the details of the HW-8 I bought on this list. The seller insisted on COD, because I could be dishonest with a certified or cashier's check. He told me he only used it for receiving; not transmitting, but all bands worked. I guess he was so worried about me being dishonest because he was not telling the truth.

I'm not sure why I'm burdening all of you with my sadness. It does make me feel a little better, though. Since I can't change the world, all I can do is make sure I'm honest myself.

<snip>

...variable 1-15V 500MA supply that I picked up at a hamfest. I was told that it works fine but guess what -- it's dead. So, time for a repair. Thanks for your help.

72,

Ron (KA3J)  
Bethesda, MD

-----  
Date: Fri, 12 Sep 1997 10:49:28 -0400 (EDT)  
From: Chris Cartwright <ccart@dns.vidtel.com>  
To: QRP Reflector <qrp-1@Lehigh.EDU>  
Subject: [26667] Re: Schematic for Heath IP-18 Power Supply  
Message-ID: <Pine.LNX.3.93.970912103827.798F-1000000@dns.vidtel.com>  
MIME-Version: 1.0  
Content-Type: TEXT/PLAIN; charset=US-ASCII

On Fri, 12 Sep 1997, Steve Ciciora wrote:

> Sorry I can't help with your p.s., but why is it that people lie to your face at  
> ham fests? In Gathersburg, I picked up a sony cordless phone for \$5, expecting

I'm not sure if it was done this year, but in previous years the local (to Gaithersburg) MARC club, set up a "test table" on the fest grounds. Nothing elaborate, power supplies, meters, dummy load, just basic test gear. Usually asking the seller to take it to the test table with you was enough to find out the "real" condition of the item in question. If they hem an haw, you have your answer. And if they went to the table you could get a real good answer:)

I ran into a guy at the G-burg fest, that I bought a 2M all-mode from last year. The only reason I recognized him was that he was one of the few tables that had all his gear powered up! Not much haggling to do there, play with it, buy it.

-- Chris Cartwright, Technical Engineer | ccart@vidtel.com --  
-- N3XRV QRP WAS 17/9 (w/c) | ccart@erols.com --  
-- QRP-L #655 NORCAL #1891 QRP-ARCI #???? | http://dns.vidtel.com/~ccart --  
-- WIMPS Q's=04 30M=04 17M=00 12M=00 STATES=03/00/00 DX=00/00/00 QSL's=00 --

-----

Date: Fri, 12 Sep 97 10:56:21 EDT  
From: jeverhar@camden.lmco.com  
To: cornea@vsta.com  
Cc: qrp-1@Lehigh.EDU, njqrp@njqrp.org  
Subject: [26668] Re: end fed half wave antenna  
Message-ID: <9709121456.AA04572@train11.CAMDEN.LMCO.COM>

Bob, you queried:

>Does anyone out there have experience with the end fed antenna that the  
>rainbow tuner requires. Im not clear on how to build this antenna. Is it fed  
>with coax? How does it wor  
> Thanks, kBob KC5HLO

Actually hte end fed iwre is just what the name implies: a wire that is elevated and fed directly to a tuner. It has a very high impedance and should \*not\* be fed with coax. The tuner tunes out any reactance and transforms the high impedance down to 50 ohms so you can then use coax cable between the tuner and your rig.

It may not be the right antenna for everybody since it requires bringing the end of the wire down to the tuner. Hwever it is very simple for portable setups and other applications where you \*can\* ahve ready access to the wire.

It does require a ground or a counterpoise. I have used various shcems such as radiators, a shrt lead to a ground rod or in the best case a quarter wave wire stretched out around the bushes or otherwise out of the way. Unlike random length wires or auarter wave wires, the end-fed half wave wire does not depend an a super gound for efficiency.

I wrote an article on the EFHWA for the 72 newsletter but due to the latter's demise, it was never published. Doug Hendricks, KI6DS has accepted it so it will appear in an upcoming issue of QRPP.

-----

Date: Fri, 12 Sep 1997 11:13:07 -0400  
From: Glenn Swanson <gswanson@arrl.org>  
To: qrp-1@Lehigh.EDU  
Cc: kb0rol@juno.com  
Subject: [26669] Re: ARRL, Scounts, and Amateur Radio  
Message-ID: <34195C03.6CCA@arrl.org>  
Mime-Version: 1.0  
Content-Type: text/plain; charset=us-ascii  
Content-Transfer-Encoding: 7bit

Greetings,

The ARRL has, and continues to, promote Amateur Radio to scouts!

As you may know, JOTA 1997 will mark the passage of the 40th Jamboree On The Air. This year, JOTA will take place on the weekend of October 17, 18 and 19. The "ARRL Scout Handbook," has lots of details on JOTA (frequencies, etc.), the Boy Scout "Radio" merit badge and a suggested ham radio "patch" for Girl Scouts. This ARRL booklet is available on the ARRLWeb at this URL: <http://www.arrl.org/ead/#scout>

#### Printed Scout Handbooks:

For an ARRL "JOTA Package" containing the ARRL Scout Handbook plus 9 brochures (7 for Boy/Cub Scouts and 2 for Girl Scouts) please send an 8.5-inch by 11-inch self-addressed, self-stamped envelope (SASE), with \$1.25 (US) postage on it (add \$0.23 for every 5 additional brochures), to: ARRL - EAD, 225 Main Street, Newington, CT 06111, Attn: Scout. Be sure to specify how many of each brochure (Boy Scout or Girl Scout), you'll require. The request for the SASE is merely to help us recover \*a portion\* of the ARRLs production (printing) and mailing costs.

As for starting any further ARRL programs, I'd refer you to your ARRL Division Director, as he or she represents your interests in ARRL matters. (For what it's worth: While we all trust that things are getting better in the ham radio world as of late, keep this in mind when you approach your Director regarding any plan involving the ARRL: From the Special Session of the ARRL Board of Directors, October 1996: "11. Chief Financial Officer Shelly reported that trends in the industry continue in decline, and that a loss from operations of approximately \$500,000 is expected for the year." See QST, January 1997, page 63.) See your Division Director regarding this or any other Board-related matter.

#### ARRL brochures for scouts:

For your planned JOTA events, we have brochures that serve to introduce scouts to Amateur Radio: Our "E6" brochure, "Scouts On-The-Air," serves to introduce Boy Scouts (and Cubs) to Amateur Radio and our "E8" brochure "HAM RADIO: A Fun Challenge for Girl Scouts," is for Girl Scouts. ( An order form for these EAD "Exhibit Kit" brochures appears on the ARRLWeb at: <http://www.arrl.org/ead/#exhibit> ) I'd also recommend some of our "So, You Want to be a Ham?" flyers, which answer common questions folks have about getting started in Amateur Radio.

#### ARRL-EAD Videotape Series:

The ARRL Educational Activities Department offers a series of educational videos: Our Volume 1, titled "Recruitment," has a great program on it titled, "New World of Amateur Radio." It is a fast-paced introduction to Amateur Radio that does a good job of explaining what



Amateur Radio is all about--given the time allowed (28-min.). There are 9 volumes, total: See the ARRLWeb (<http://www.arrl.org/ead/#video>) for the full list. Those without web access can write to the ARRL for to request the listing, of course. ARRL, 225 Main St., Newington, CT 06111. Or, call the ARRL Educational Activities Department at 860-594-0301.

I hope you--and the scouts--enjoy Amateur Radio and JOTA 1997, the 40th Jamboree On The Air! Please feel free to contact me if you have any questions pertaining to JOTA and I'll be happy to help you in any way that I possibly can. Have a great time with JOTA!

Sincere best regards,  
Glenn Swanson, KB1GW  
Educational Programs Coordinator,  
ARRL Educational Activities Department  
E-mail: [kb1gw@arrl.org](mailto:kb1gw@arrl.org)  
ARRL Web: <http://www.arrl.org/>

> -----

>From: Bradley L Mugleston

>To: qrp-l

>Cc: [ARRL] hq

>Subject: What I did on my summer vacation - part 2

>Date: Friday, September 05, 1997 11:37PM

> -----Internet Headers-----

>From: kb0rol@juno.com (Bradley L Mugleston)

> -----

>Well I got an address for some one associated with the scouts and the one  
>to Tandy bounced. I also got about a dozen direct replies, all positive with  
>additional points so I will continue.

>

>I realize the NRA probably didn't spend any money on the range but NRA  
>was all over, Hats, vests, targets, badges.... If those hundred or so  
>scouts that were there the week I was there don't at least associate the  
>great time they had with NRA they must not have been to the shooting  
>range.

>

>Wouldn't it be great if the ARRL, Kenwood, Icom etc would get together  
>and work with the scouts to promote RADIO! The 8 Page ad in the Scouting  
>Magazine wasn't from one source but from Mossberg, Ruger, The National  
>Sporting Foundation and probably others. It was one of those Info Ads -  
>you know the ones that sell you something and you don't know it. Every  
>Scout Leader that was at camp now has something that tells them about the  
>scout merit badge, gun safety and how guns are used in the Olympics.  
>What have they learned about Ham radio- nothing. What are they going to  
>teach next week, well it probably wont be ham radio.

>

>OK enough, as I told a few of you who responded, I do expose my scouts to

>radio but I see a very small percentage of scouts and only a small  
>percentage of those showed any interest (at least enough to work on  
>getting a license). We need to hit a larger target.  
>  
>de KBØROL, Brad  
>

-----  
Date: Fri, 12 Sep 1997 09:12:56 +0000  
From: "Marshall Emm" <mgemm@mtechnologies.com>  
To: qrp-1@Lehigh.EDU  
Subject: [26670] CQC Swaplist Update  
Message-ID: <199709121515.JAA00661@bobcat.sni.net>  
MIME-Version: 1.0  
Content-type: text/plain; charset=US-ASCII  
Content-transfer-encoding: 7BIT

The CQC Swaplist has been updated. Check it out on the web:  
<http://www.mtechnologies.com/mthome/cqc.htm>

Or email me to be put on the email distribution list.

73  
Marshall Emm  
N1FN/VK5FN  
n1fn@mtechnologies.com  
<http://www.mtechnologies.com/mthome>  
(303)752-3382  
--

-----  
Date: Fri, 12 Sep 1997 10:40:50 -0400  
From: Thomas Isgro <kc8dgu@postoffice.worldnet.att.net>  
To: drichff@worldnet.att.net  
Cc: Low Power Amateur Radio Discussion <qrp-1@Lehigh.EDU>  
Subject: [26671] Re: Kits for technicians  
Message-ID: <34195472.6E7F@postoffice.worldnet.att.net>  
MIME-Version: 1.0  
Content-Type: text/plain; charset=us-ascii  
Content-Transfer-Encoding: 7bit

Ten Tec has a line of kits in the VHF-UHF range. I have personally  
built the 2 meter mobile FM transceiver. Good kit.

--

\*\*\*\*\*  
\*\*\*\*\*

73 de  
KI8CZ  
Tom Isgro  
OHIO

10-X #68364      SCI #1479      QRP-L #945      ARS #203  
C.A.T.T #2115      FIST 2360      NORCAL      ARRL

\*\*\*\*\*  
\*\*\*\*\*

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Date: Fri, 12 Sep 1997 11:29:02 -0400  
From: Ed Pacyna <pacyna@auratek.com>  
To: kd7s@psnw.com  
Cc: "Low Power Amateur Radio Discussion" <qrp-l@Lehigh.EDU>  
Subject: [26672] Re: Looking For Superhet Design Software  
Message-ID: <3.0.16.19970912112900.21177688@dingie.auratek.com>  
Mime-Version: 1.0  
Content-Type: text/plain; charset="us-ascii"

At 01:13 PM 9/11/97 -0700, Bill Jones wrote:

>Friends,  
>

>I've heard tell of a simple software package that will calculate mixer  
>and VFO products which can fall within the tuning range of a superhet  
>receiver. Does anybody know anything about this?

Both Introduction to RF Design by Wes Hayward and SSB Systems and Circuits  
by Bill Sabin include software programs on a 3.5" floppy that calculate  
mixer products etc.. The Hayward program actually has a graphical display  
that has the look and feel of a spectrum analyzer.

Ed, W1AAZ

-----

Date: Fri, 12 Sep 1997 08:47:41 -0700

From: ki6ds@dpol.k12.ca.us (Hendricks, Doug)  
To: qrp-l@Lehigh.EDU  
Subject: [26673] Possible Pacificon Confusion  
Message-ID: <3.0.1.32.19970912084741.007078ac@telis.org>  
Mime-Version: 1.0  
Content-Type: text/plain; charset="us-ascii"

Guys, yesterday Ed Loranger posted to the net that he had been invited to speak at the Antenna Forum at Pacificon, as three of the speakers had pulled out and they were in need. Congrats to Ed, and we are happy that you are going to be at Pacificon for all of the fun. But, Ed's posting caused some concern and generated some email for me, wanting to know who had canceled etc. Ed's posting had to do with the speaker's at the Pacificon Antenn Forum, NOT the Pacificon QRP Symposium. I have confirmations from all of the speakers, they will be there. If you haven't made your reservations there are still rooms available at the Concord Hilton for Pacificon which will be Oct. 17, 18, and 19. The good news for Ed is that his talk is on Friday, and the QRP Forums are all on Saturday, so he will be able to attend. Here is the lineup of speakers:  
Saturday October 18th

9:00 Gary Diana and Brad Mitchell  
10:00 Dave Benson  
11:00 Paul Harden  
11:55 Announcement of winners of the NorCal Design Contest

1:00 Wayne Burdick and Eric Swartz  
2:00 Dave Gauding  
3:00 Roy Lewallen

QRP Show and Tell to be held at 7:00 PM Saturday night in the DeForest Room.

There is no additional charge for the QRP Forums, all that is required is that you pay the entry fee to Pacificon, which is \$3 in advance, \$5 at the door, and entitles you to all 3 days of the convention.

72, Doug, KI6DS

-----  
Date: Fri, 12 Sep 1997 10:44:33 cdt  
From: wj5o@juno.com (William H. Hays)  
To: QRP-L@Lehigh.EDU  
Subject: [26674] marine VHF question  
Message-ID: <19970912.104434.15870.0.WJ50@juno.com>

Ah!, to the fountain of knowledge again--the QRP list.

Is there still a requirement to register a marine VHF rig?

Are there exceptions to the regulations in regards to sports boats vs commercial (like shrimpers)?

Well, the hand helds are QRP.

Any replies will be appreciated & will be responded to.

72/73 Bill

-----  
Date: Fri, 12 Sep 1997 10:20:45 -0600  
From: "Martin, Lou (MCI)" <Lou.Martin@mci.com>  
To: "'qrp-1@Lehigh.EDU'" <qrp-1@Lehigh.EDU>  
Subject: [26675] Wavetek 27XT DOES NOT Measure Very Small Inductances  
Message-ID: <69F193633859D011B6F10000F802AC280129071B@omzexch001>  
MIME-Version: 1.0  
Content-Type: text/plain

Hi Everyone,

Tech America's sale on the Wavetek 27XT DMM/LC meter caught my attention yesterday, but also raised a question about its low range inductance measurement capabilities. Upon checking with the factory, I was informed that this test meter will only measure down to 0.1mH. Not enough for us homebrewers.

So although the \$69 sale price is inviting, be aware of this limitation.

73, LOU

-----  
Date: Fri, 12 Sep 1997 12:32:55 -0400  
From: Ricky McNelly <72507.235@CompuServe.COM>  
To: qrp-1@Lehigh.EDU  
Subject: [26676] Re: OHR scf vs RS DSP?  
Message-ID: <199709121236\_MC2-2033-94E8@compuserve.com>  
MIME-Version: 1.0  
Content-Transfer-Encoding: 7bit  
Content-Type: text/plain; charset=us-ascii  
Content-Disposition: inline

To: > INTERNET:qrp-1@Lehigh.EDU

Wow!

When you post a question to this list the response is great! Many members have replied privately and the OHR SCAF wins hands down. My RS DSP will be up for sale at the upcoming Virginia Beach Hamfest and I'll place an order with OHR as soon as my XYL will let me ;-)

I think she suspects I use the list to help justify and support my growing addiction to building kits :-).

Thanks again to all who responded.

72/73's,

--Rick, KE4IZH

Chesapeake, VA 09/12/97.

-----  
Date: Fri, 12 Sep 1997 11:44:24 -0500 (CDT)  
From: Russ - N5LT <russ@inetport.com>  
To: qrp-1@Lehigh.EDU  
Subject: [26677] Ten-Tec HF QRP comments?  
Message-ID: <1.5.4.16.19970912115505.4e777206@inetport.com>  
Mime-Version: 1.0  
Content-Type: text/plain; charset="us-ascii"

Just curious if anyone has built any of the Ten-Tec QRP radios and, if so, what they thought about them?

Tnx.

Russ--

N5LT  
russ@inetport.com

-----

Date: Fri, 12 Sep 1997 11:51:30 -0500  
From: Mike Broga <mbroga@cu-online.com>  
To: qrp-1@Lehigh.EDU  
Subject: [26678] Keyboard software  
Message-ID: <199709121651.LAA20204@mail.advancenet.net>  
Mime-Version: 1.0  
Content-Type: text/plain; charset="us-ascii"

Thanks to all that answered my question. I have several sources to check out now.

Great group and I hope to have my 38-s on the air soon.

Mike, W9KVF

-----  
Date: Fri, 12 Sep 1997 10:01:17 -0700  
From: Larry Deering <ldeering@idt.net>  
To: qrp-1@Lehigh.EDU  
Subject: [26679] Solar Flux is ...  
Message-ID: <3419755D.6A18@idt.net>  
MIME-Version: 1.0  
Content-Type: text/plain; charset=us-ascii  
Content-Transfer-Encoding: 7bit

The solar flux has been as low and long as a sleeping Dachshund. Lately, that dog is starting to bark! It's time for some antenna work to catch the fall equinox conditions.

72 es GL,  
Larry W2GL

=====

Paul Harden NA5N wrote:

<snip>

SOLAR

| FLUX | JUN 97 | JUL 97 | AUG 97 | SEP 97 | OCT 97 |
|------|--------|--------|--------|--------|--------|
| 130  | -      | -      | -      | -      | -      |
| 120  | -      | -      | -      | *      | -      |
| 110  | -      | -      | -      | *      | -      |
| 100  | -      | -      | -      | **     | -      |
|      |        |        |        | **     | -      |
|      |        |        |        | **     | -      |
|      |        |        |        | ****   | -      |

```

90 -|-----*****-----|
    |           |           |           |           |
80 -|           |           | **  ***** |           |
    |           |           |*****|           |
70 --*****-----

```

Initial observations indicate that this may very well be the sudden start of the new solar cycle, with solar flux bound to steadily increase. Should the 10.7cm flux remain at 100 or above over the next 10 days, it will likely remain there, and the next solar cycle is here for sure.

```

-----
Date: Fri, 12 Sep 1997 12:03:11 -0500
From: wmcshan@REX.RE.ouhsc.edu (Mike McShan)
To: qrp-1@Lehigh.EDU
Subject: [26680] Re: OHR scaf vs RS DSP?
Message-ID: <v01540b02b03f252f98c4@[157.142.56.167]>
Mime-Version: 1.0
Content-Type: text/plain; charset="us-ascii"

```

```

(snip)
> When you post a question to this list the response is great! Many
>members have replied privately and the OHR SCAF wins hands down. My
>RS DSP will be up for sale at the upcoming Virginia Beach Hamfest and
>I'll place an order with OHR as soon as my XYL will let me ;-)
>(snip)
> --Rick, KE4IZH

```

Speaking of SCAF filter kits, I noticed that Ramsey is now selling one for about \$35 (less case). Interesting feature is that there is front panel control for adjusting the center frequency (I believe that this control is internal on the OHR model - don't have either). Price sounds right, but it may be a case of you get what you pay for. :-)

Anyone tried one of these kits?

Mike N5JKY  
Edmond, OK

```

-----
Date: Fri, 12 Sep 1997 11:32:18 -0600 (CST)

```



From: "Brian.Buydens@usask.ca" <buydens@duke.usask.ca>  
To: Kent Torell <torell@sicom.com>  
Cc: Low Power Amateur Radio Discussion <qrp-1@Lehigh.EDU>  
Subject: [26681] Re: Canadian Fox message decoded  
Message-ID: <Pine.OSF.3.96.970912112044.25336C-100000@duke.usask.ca>  
MIME-Version: 1.0  
Content-Type: TEXT/PLAIN; charset=US-ASCII

On Wed, 10 Sep 1997, Kent Torell wrote:

> >Laura Halliday               "Les cigognes se sont envolées  
> >ve7ldh@direct.ca           Est-ce que nos promesses seront éternelles  
> >Grid: CN89mg                Les tournesols se sont refermés  
> >(Chenevez/Laporte)        Peut-être la vie est-elle encore belle."

My French isn't the best but here goes as my attempt at a translation:

The storks have taken-off flying  
Is it that our promises will be eternal  
The sunflowers have reclosed themselves  
Perhaps life is again/yet beautiful.

I hope I haven't butchered it ;-)

>  
>   Rats ... Laura changed her signature file, and I still haven't decoded  
> the last one .... :-( Nobody around here speaks french (which I think that  
> is ... ) and sounding it out into spanish isn't too illuminating :-(

>   This must be the secret canadian fox-hunting code message.  
>

```
+-----+
| Brian Buydens,               Computing Services, University of Saskatchewan |
| email: Brian.Buydens@usask.ca               http://duke.usask.ca/~buydens |
| VE5RDV                                                                        |
|                                                                                |
| DO NOT ADD ME TO ANY MAILING LISTS WITHOUT MY CONSENT !!!                |
+-----+
| And it's Ho, boys, can't you code it, and program it right               |
| Nothing ever happens in the life of mine                                   |
| I'm hauling up the data on the Xerox line                                   |
|                                                                                |
|       Nigel Russell (Stan Rogers Band) - "White Collar Holler"            |
+-----+
```

-----  
Date: Fri, 12 Sep 1997 13:46:09 -0400 (EDT)  
From: "Paul R. Valko" <prvalko@Oakland.edu>  
To: Russ - N5LT <russ@inetport.com>  
Cc: Low Power Amateur Radio Discussion <qrp-1@Lehigh.EDU>  
Subject: [26682] Re: Ten-Tec HF QRP comments?  
Message-ID: <Pine.OSF.3.95.970912134525.27602C-1000000@vela.acs.oakland.edu>  
MIME-Version: 1.0  
Content-Type: TEXT/PLAIN; charset=US-ASCII

I'm still waiting for the 80M kit I ordered almost TWO YEARS ago.

73! =paul= W8KC  
Collector of Ten-Tecs and other fine plastics

[www.acs.oakland.edu/~prvalko](http://www.acs.oakland.edu/~prvalko)

On Fri, 12 Sep 1997, Russ - N5LT wrote:

> Just curious if anyone has built any of the Ten-Tec QRP radios and, if so,  
> what they thought about them?  
>  
> Tnx.  
>  
>  
> Russ--  
>  
> N5LT  
> russ@inetport.com  
>  
>  
>

-----  
Date: Fri, 12 Sep 1997 12:21:39  
From: Steven Weber <kd1jv@moose.ncia.net>  
To: nskouisen@scientech.com  
Cc: qrp-1@Lehigh.EDU  
Subject: [26683] Re: RS DSP hacked ?  
Message-ID: <3.0.1.16.19970912122139.207f155c@mailhost.ncia.net>  
Mime-Version: 1.0  
Content-Type: text/plain; charset="us-ascii"

>has anybody done a DSP fix on the RS-DSP ?? Not my forte, but seems that a  
>code rework and replace the masked part and you could have a  
>semi-reasonable low-cost DSP filter...

>

>Anybody done it ??

>

I took a peek inside mine, as I was adding additional RF bypassing and such to the power leads and speaker jack, and changing out the DSP chip would not be an easy thing to do. Be a whole lot easier just to build a whole new one. Anyway, since it does use a mask programmed chip, you would have to replace it with the same, and that would cost about \$100,000.

73,

Steve, KD1JV....In the White Mountains of New Hampshire

"Melt Solder"

-----

Date: Fri, 12 Sep 1997 10:52:40 -0700  
From: Ed Loranger <we6w@qsl.net>  
To: Low Power Amateur Radio Discussion <qrp-l@Lehigh.EDU>  
Subject: [26684] Re: F Connector usage  
Message-ID: <34198168.5228@qsl.net>  
Mime-Version: 1.0  
Content-Type: text/plain; charset=us-ascii  
Content-Transfer-Encoding: 7bit

Down with F connectors!

Once again I came home, xyl and harmonics in a frenzy.

No signal from the roof mounted deep fringe antenna with pre-amp. No TV.

So the miracle worker (who else) goes outside and finds the coupling barrel where I have two sections of coax screwed together. Sure enough, the center connector and dielectric have slid back and away.

So I grasp the jacket and connector firmly and push them together as best I can, eventually feeding the center connector into its functional position just to the ends of the threads.

Clean it up a bit and FB on the TV Sig.

Taped the jacket tightly and have it all functional as a unit.

It's going to be BNC next time with soldered center pins.

-Ed

--

72/73 de we6w qrp es cw ONLY (From non-ham to extra in one day!)

HW-8;OHR-100, Pixie2, Johnson Viking II w/VFO.

QRP-L#1068/ARCI#9397/Norcal#2227/ARS#275/AR#112 grid CM88ok

mailto:we6w@qsl.net <http://www.qsl.net/we6w>

-----  
Date: Fri, 12 Sep 1997 10:54:27 -0700

From: Ed Loranger <we6w@qsl.net>

To: ccart@dns.vidtel.com

Cc: Low Power Amateur Radio Discussion <qrp-l@Lehigh.EDU>

Subject: [26685] Re: Where are the new hams?

Message-ID: <341981D3.48E7@qsl.net>

Mime-Version: 1.0

Content-Type: text/plain; charset=us-ascii

Content-Transfer-Encoding: 7bit

FB on the Novice Band contact Chris.

I've been ill all week with a temp of 101. But still found a few minutes next to the rig last night on 7110.

Was hoping to make a novice contact but everyone was taken.

It really is busy up there every once in a while. Also a nice break when there are QRO contests down in the low 40 Meter areas.

Unfortunately not everyone is hunting for novice contacts -- and what bothers me is all the QRQ code that just shuts these budding hams out.

I always try varying my speed from 5 to 13 wpm when in the Novice band. Give em a chance to answer.

-----=

A humorous aside, 2 days ago about 10 AM PDT, was listening to a QRQ dude QSO and had to laugh.

They were going back and forth with info and the one guy

wanted to break in due to an interruption at his QTH.

BK I I I HELP QSK? nuts.

Nuts. Help. I I I Nuts.

He sent all that while the other guy just QRQ'd along.

Nuts. I felt good enough to go to work.

A third parth sent a 'Hi Hi'. I am sure others were laughing too.

It's fun to copy in your head.

-Ed

--

72/73 de we6w qrp es cw ONLY (From non-ham to extra in one day!)

HW-8;OHR-100, Pixie2, Johnson Viking II w/VF0.

QRP-L#1068/ARCI#9397/Norcal#2227/ARS#275/AR#112 grid CM88ok

mailto:we6w@qsl.net <http://www.qsl.net/we6w>

-----  
Date: Fri, 12 Sep 1997 14:00:44 -0400  
From: "Mark S. Adams" <msadams@acsu.buffalo.edu>  
To: qrp-l@Lehigh.EDU  
Subject: [26686] QRV in Newport, OR  
Message-ID: <3419834C.58F7@acsu.buffalo.edu>  
MIME-Version: 1.0  
Content-Type: text/plain; charset=us-ascii  
Content-Transfer-Encoding: 7bit

Hi Gang,

I will be in Newport, OR next month for a week and will be at the Holiday Inn on the Ocean.

1) Are there any QRP groups in this area?

2) I plan on running an SW40 or OHR100/20 setup. Can anyone comment on how/where might be good? I suspect a beach setup right on the ocean might be good.

Thanks es 72,  
Mark N2VPK

-----  
Date: Fri, 12 Sep 1997 14:15:14 -0400  
From: "Robert W. Shaw" <lycott@fox.nstn.ca>  
To: "Low Power Amateur Radio Discussion" <qrp-l@Lehigh.EDU>  
Subject: [26687] A couple of unusual transmatch questions  
Message-ID: <3.0.1.32.19970912141514.00899100@fox.nstn.ca>  
Mime-Version: 1.0  
Content-Type: text/plain; charset="us-ascii"

To all those that answered my questions, and continued the thread on "F" connectors, THANKS.

I have reformed, and bought some BNC connectors, adaptors etc. and RG58. I agree with posts that F is OK for temporary/emergency work, but is sub-optimal.

Re the multiple transmatches, I have noticed that the Rainbow Tuner is effectively disconnected by pulling the shorting bar, and mounting it "along the coil taps". Thus I do not need to run two transmatches in parallel to use the Rainbow's SWR indicator on both!

I'm still not happy why the SWR changes along the coax connecting the transceiver to a properly adjusted transmatch, as there should be NO standing waves at this point, as there should be NO REFLECTED POWER from the transmatch to the transceiver.

Thanks all for the discussion.

72/73 de Bob VE3SUY (lycott@fox.nstn.ca)  
Robert W. Shaw, Ottawa, Ontario, Canada

Visiting Disney in Florida? -- see <<http://fox.nstn.ca/~lycott/florida9.html>>

-----  
Date: Fri, 12 Sep 1997 11:17:45 -0700  
From: Ed Loranger <we6w@qsl.net>  
To: ki6ds@dpol.k12.ca.us  
Cc: Low Power Amateur Radio Discussion <qrp-l@Lehigh.EDU>  
Subject: [26688] Re: Possible Pacificon Confusion  
Message-ID: <34198749.79E6@qsl.net>  
Mime-Version: 1.0  
Content-Type: text/plain; charset=us-ascii

Content-Transfer-Encoding: 7bit

Thanks for the clarification Doug. Sorry, didn't mean to confuse anyone.

I declined to speak at the antenna forum.

I will be there and will probably look lost :)

My xyl took \$1. So now I'm down to \$1 in the wallet.

Hmmm.... Going the wrong way.

So, how do I get an advanced ticket so I can save \$2.00 ?

Can't wait to have some eyeball QSO's.

There's a year old picture of me on my web page so you can recognize this lost puppy when you see him.

Maybe I'll get a hat with WE6W on it or something...

Maybe not.

I'm Low power and Low Key.

-Ed.

--

72/73 de we6w qrp es cw ONLY (From non-ham to extra in one day!)

HW-8;OHR-100, Pixie2, Johnson Viking II w/VFO.

QRP-L#1068/ARCI#9397/Norcal#2227/ARS#275/AR#112 grid CM88ok

mailto:we6w@qsl.net <http://www.qsl.net/we6w>

-----  
Date: Fri, 12 Sep 1997 13:47:02 -0400

From: "N4ELM" <n4elm@ipass.net>

To: <qrp-1@Lehigh.EDU>

Subject: [26689] WTB: keyer and audio filter for MFJ 90XX transceiver

Message-ID: <199709121821.0AA12104@passport.ipass.net>

MIME-Version: 1.0

Content-Type: text/plain; charset=ISO-8859-1

Content-Transfer-Encoding: 7bit

Looking for the optional keyer and audio filter modules for a MFJ 9020 CW Transceiver.

Will consider buying an entire MFJ 90XX radio with the modules for a reasonable price.

73 - Dave, N4ELM.

-----  
Date: Fri, 12 Sep 1997 12:55:48 -0500  
From: "j.w. thornton" <dub@oklahoma.net>  
To: qrp-1@Lehigh.EDU  
Subject: [26690] Re: Code Readers  
Message-ID: <3.0.3.32.19970912125548.00f97f20@oklahoma.net>  
Mime-Version: 1.0  
Content-Type: text/plain; charset="us-ascii"

At 04:34 AM 9/12/97 -0400, you wrote:

>Greetings to one and all:

>

>Recently someone posted the suggestion that one way to learn high  
>speed code was to use a code reader as a backup. I have decided that  
>this approach makes sense for me so I am beginning my shopping .  
>So far I have been able to identify two suppliers: MFJ and Microcraft  
>Corp.

>

>I would appreciate hearing from who has information/suggestions on  
>the following:

>

>1. Names and addresses of other suppliers;

Stephen Stuntz N0BF used to have a CW program for the PC and schematic for  
homebrew interface that worked quite well.

Dub WA5YFY  
J. W. (Dub) Thornton  
QRP-1 # 159  
ARCI #6982  
NW QRP # 427  
Minco, Okla. 73059

-----  
Date: Fri, 12 Sep 1997 11:49:00 -0700 (MST)  
From: Chris Trask <ctrask@primenet.com>  
To: "Martin, Lou (MCI)" <Lou.Martin@MCI.Com>  
Cc: Low Power Amateur Radio Discussion <qrp-1@Lehigh.EDU>  
Subject: [26691] Re: Wavetek 27XT DOES NOT Measure Very Small Inductances  
Message-ID: <Pine.BSI.3.96.970912114740.17316A-100000@usr07.primenet.com>  
MIME-Version: 1.0



On Fri, 12 Sep 1997, Martin, Lou (MCI) wrote:

If you're looking for a low-cost instrument for measuring low inductances, try a Tektronix model 130. They usually go pretty cheap. I got mine for \$25 at an auction.

Chris

Circuit Design for the  
RF Impaired

Chris Trask / N7ZWY  
Principal Engineer  
ATG Design Services  
P.O. Box 25240  
Tempe, Arizona 85285-5240

Technical Editor,  
QRP Quarterly  
QRP ARCI 9464

Email: [ctrask@primenet.com](mailto:ctrask@primenet.com)

Graphics by Loek Frederiks

Date: Fri, 12 Sep 1997 12:21:31 -0700  
From: Ed Loranger <we6w@qsl.net>  
To: buydens@duke.usask.ca

Cc: Low Power Amateur Radio Discussion <qrp-l@Lehigh.EDU>  
Subject: [26692] Re: Canadian Fox message decoded  
Message-ID: <3419963B.E72@qsl.net>  
Mime-Version: 1.0  
Content-Type: text/plain; charset=us-ascii  
Content-Transfer-Encoding: 7bit

I know ZERO French, but looks like fun. How about:

"The times are a changing  
and not promises are given.  
Use what you know and  
venture forth."

-Ed Loranger, Spanish language yes, French - Nada.

Brian.Buydens@usask.ca wrote:

>  
> On Wed, 10 Sep 1997, Kent Torell wrote:  
>  
> > > Laura Halliday "Les cigognes se sont envolées  
> > > ve7ldh@direct.ca Est-ce que nos promesses seront éternelles  
> > > Grid: CN89mg Les tournesols se sont refermés  
> > > (Chenevez/Laporte) Peut-être la vie est-elle encore belle."  
>  
> My French isn't the best but here goes as my attempt at a translation:  
>  
> The storks have taken-off flying  
> Is it that our promises will be eternal  
> The sunflowers have reclosed themselves  
> Perhaps life is again/yet beautiful.  
>

--  
72/73 de we6w qrp es cw ONLY (From non-ham to extra in one day!)  
HW-8;OHR-100, Pixie2, Johnson Viking II w/VFO.  
QRP-L#1068/ARCI#9397/Norcal#2227/ARS#275/AR#112 grid CM88ok  
mailto:we6w@qsl.net <http://www.qsl.net/we6w>

-----  
Date: Fri, 12 Sep 1997 15:14:55 -0400  
From: Ed Pacyna <pacyna@auratek.com>  
To: qrp-l@Lehigh.EDU  
Subject: [26693] Active Band Pass Filters - Some staggering thoughts  
Message-ID: <3.0.16.19970912151454.33779d8a@dingle.auratek.com>  
Mime-Version: 1.0

Content-Type: text/plain; charset="us-ascii"

## OVERVIEW:

The purpose of this post is to introduce a method for designing high performance, low cost active filters.

It's very easy to build very narrow band active audio filters by cascading identical stages one after another (each having the same center frequency, gain and Q). These are known as synchronously tuned filters and have been implemented by the vast majority of equipment providers to the QRP community (e.g. Ten-tec, Heathkit, MFJ, XYZ Kit Company etc.). You have seen this methodology used over and over again in filter "how to" and receiver construction articles (e.g. 73, QST, Handbook, Solid State Design, W1FB QRP books, QRP club publications etc.).

Synchronous filters may be adequate for some tasks but leave a lot to be desired in terms of transient response (ringing), band-pass (peaked) amplitude response and skirt selectivity (shape factor). The ability of a stagger tuned filter to reject interference and its sound quality will be vastly superior to that of a synchronously tuned filter.

## THE PROBLEM WITH SYNCHRONOUSLY TUNED FILTERS:

When cascading identical (same Q and frequency) filter stages, the bandwidth of the individual stages combine and the total overall Q is reduced by a shrinkage factor. In other words, selectivity is achieved by increasing the overall Q. However, recall that  $Q = \text{center frequency} / \text{bandwidth}$ , so the total practical Q is limited (typically 5 to 7) and the few additional poles introduced by the additional stages contribute very little to improving the filter's shape factor.

## A STAGGERING SOLUTION

Consider for the moment the amplitude response of a 2 stage filter (identical gain, Q and center frequency). Now move the frequency of one of the stages slightly higher in frequency. Notice how the rounded top flattens somewhat. If you keep moving the frequency higher, the response changes to two peaks with a dip in the center and eventually to 2 entirely separate amplitude responses. As you moved one frequency not only did the sum of the two stages combine to produce a new amplitude shape, something else happened. The skirts on the section increasing frequency also shifted. The composite response of the two sections (with different frequencies) has much steeper skirts.

To illustrate, the 3:30 dB points for a 2 stage synchronously tuned filter ( $F_c = 1000\text{Hz}$ , overall  $Q = 1.67$ ) are 5,300 and 622 Hz respectively so the shape factor is 8.52 ( $5300/622$ ). In a 2 stage stagger tuned filter ( $F_c =$

1000Hz, overall  $Q = 1.67$ ) the 30 dB point is 3940 Hz and the shape factor is now 6.33 (3940/622). In addition the amplitude response goes from quite round to flat. Note: The >6:60 dB points in such a simple filter would be a joke.

IT KEEPS GETTING BETTER

Using this principle it is possible to synthesize high performance filters to meet specific pass band, band stop, shape factor and transient requirements. For example a 6 stage filter with a 6:60 dB shape factors of 2:1 or less is easily achievable. This is because there is no longer a limitation on individual stage  $Q$ 's.

The approach is topology independent. The multiple feedback (MFB) circuit most commonly used in building filters works quiet well. This means that there are lots of existing PCB's available (or you can just upgrade an existing filter). A typical MFB stage would require that only 3 resistors be changed.

The procedure has a couple of steps. Depending on the filter response you specify, you will need to determine the required stage  $Q$ , frequency and gain in addition to the component values.

For those that have access to back issues of Ham Radio magazine, the December 1977 issue has excellent article on building stagger tuned filters. In addition, it includes a number of graphs that will cut down the required mathematical calculations. The other reference is the Electronic Filter Design Handbook by Williams and Taylor. Its a professional reference and quite comprehensive.

73

Ed, W1AAZ

-----  
Date: Fri, 12 Sep 1997 08:02:44 -0700  
From: torell@sicom.com (Kent Torell)  
To: johns516@maroon.tc.umn.edu  
Cc: qrp-l@Lehigh.EDU  
Subject: [26694] Re: NorCal 40a design question  
Message-ID: <v02130500b03f081ba567@[192.91.202.41]>  
Mime-Version: 1.0

Content-Type: text/plain; charset="us-ascii"

>I have been studying the textbook put out by Professor Rutledge at Cal Tech  
>(and Wayne Burdick) which details the design of the NorCal 40a transceiver.

.....

>I assume this means that at point "A" (between the crystal filter and L4)  
>we should "see" 200 ohms impedance (to ground) in both directions. Right?

Yes.

>I would like to use the suggested values of L4 and C14 and hopefully  
>calculate somewhere near 200 ohms of impedance.  
>OK, here is my approach:

...[calculates parallel combination of 1500 ohms and 50 pf ]

> so  $Z = 1/Y = 595$  ohms and phase angle is  $\arctan(B/G) = -66$  degrees

Correct.

>Now, do I add these two parts (vectors), because they are in series?

>

>        555 (with angle +90) + 595 (with angle -66) = ??

Yes. You are just one step away from the answer. To add the complex  
vectors, convert back to rectangular coordinates:

$+j555 + 242 - j544 = 242 + j11$  , which is 'close enough' for the  
design point of 200 ohms.

Another check is that the reactive elements should resonate at the design  
frequency.

Doing good! :-)

Kent Torell    torell@sicom.com    602-607-4852  
SICOM    7585 E. Redfield, #202    Scottsdale, AZ    85260  
AB70A    scQRPion 6,qrp-1 57,ARCI 9075    DM33xn    33.55 N 112.078 W

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Date: Fri, 12 Sep 1997 17:01:05 -0500

From: "William R. Moore" <wr.moore@worldnet.att.net>

To: "Low Power Amateur Radio Discussion" <qrp-l@Lehigh.EDU>  
Subject: [26695] 17m QRP freq?  
Message-ID: <19970912220053.AAA20382@wrmoore-rpc>  
MIME-Version: 1.0  
Content-Type: text/plain; charset=ISO-8859-1  
Content-Transfer-Encoding: 7bit

Where do you guys hang out on 17m? Its been open very nicely this  
afternoon from N. Alabama.

72/73,  
Randy, KS4L

-----  
End of QRP-L Digest 846  
\*\*\*\*\*  
-----